



**THE OHIO STATE UNIVERSITY**

**JOHN GLENN COLLEGE OF PUBLIC AFFAIRS**

Prepared by:  
Andrew R. Thomas  
William Bowen  
Edward W. Hill  
Adam Kanter  
Taekyoung Lim

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Energy Policy Center  
Levin College of Urban Affairs  
Cleveland State University  
2121 Euclid Avenue Cleveland, Ohio 44115  
<http://urban.csuohio.edu>

**ELECTRICITY  
CUSTOMER CHOICE  
IN OHIO: HOW  
COMPETITION HAS  
OUTPERFORMED  
TRADITIONAL  
MONOPOLY  
REGULATION**

## EXECUTIVE SUMMARY

It took nearly a decade of sorting out regulatory problems, but by 2011 deregulation of electricity in Ohio began to work exactly how economic theory projected it would. Since 2011, a robust retail market for electricity has developed in Ohio. As a result, deregulation of electricity has saved consumers an average of \$3 billion per year, for a total of \$15 billion over five years. Moreover, it is projected to continue to save consumers nearly that amount for the next five years, through 2020, totaling another \$15 billion in savings. Further, the Midwestern deregulated states (Ohio, Pennsylvania and Illinois) have, over time, outperformed their regulated Midwestern neighbors (Michigan, Indiana and Wisconsin) in terms of constraining electricity costs for consumers.

This study was undertaken to assess the effects that deregulation of electricity generation has had on electricity prices in Ohio. Deregulation has recently become controversial in Ohio as a result of several of Ohio's investor-owned utilities ("IOUs") having sought price supports for their uncompetitive generation facilities. The IOUs sought these supports even though Ohio had deregulated the generation side of the electricity business in 2001.

The utilities argued that the price supports were necessary because without them, major existing generation facilities would be shut down, threatening grid reliability and increasing price volatility. In short, competition in Ohio had become a problem for its IOUs, whose aging generation fleet was struggling to remain competitive. Accordingly, Ohio's IOUs sought, and received, authority from the Public Utilities Commission of Ohio (PUCO) to assess ratepayers with additional fees to subsidize the flagging generation fleets.

The Federal Regulatory Commission subsequently ruled that the proposed price supports, which would have been passed through to ratepayers as a rider on the regulated side, were illegal, finding that they were inconsistent with deregulated markets and threatened to undermine regional wholesale electricity markets. Consequently, the IOUs have begun to argue through media and other venues that Ohio should abandon its deregulated electricity markets in favor of the traditional fully regulated monopoly model that American utilities have followed for most of the 20<sup>th</sup> century.

Such a strategy, however, would cost Ohio's ratepayers significantly. The research contained in this Study demonstrates that Ohio consumers have realized billions of dollars in savings in each of the past five years due to the deregulation of electricity generation. The savings have been realized in part because Ohio's IOUs have begun setting their electricity generation standard service offers (SSO, also called "Price to Compare," or "PTC") through competitive auctions, and in part because Ohio's consumers (over 70%) have been able to shop for their electricity loads. Further, these savings are in keeping with the trends seen by other states that have switched to competitive electricity generation.

These results are consistent with research to date looking at the effects of deregulation, which have tended to find that deregulation reduces electricity prices. As has been done with other

studies, this Study relied on data from the Energy Information Agency, comparing similarly situated states in the Midwest, namely Ohio, Illinois and Pennsylvania (deregulated) against Wisconsin, Indiana and Michigan (regulated). However, the Study differed from most prior studies in two important ways. First, the Study Team used difference-in-difference statistical modeling to control for variables that would affect electricity price (e.g. time-related trends). Second, the Study Team assessed savings due to shopping.

The reason why prior studies have not sought to evaluate savings from shopping is that the data supporting such a study is not publicly available. The Study Team resolved this problem by organizing the shopping data into two sets: mercantile (greater than 700,000 kWh/year consumption) and non-mercantile (less than 700,000 kWh/year). For the latter, the Study Team assumed a savings rate of 6% for residential shoppers and 4% for commercial shoppers off of the Price to Compare. These sorts of rates have generally been available from aggregators in Ohio in the past five years. For the former, the Study Team used data sets aggregated from private data banks held by local brokers who track electricity procurement by their clients.

Analysis of the pricing data demonstrates that Ohio ratepayers have avoided nearly \$15 billion in the past five years in result of competition. Of this, around \$3 billion is from shopping, 4/5 of which is from mercantile and 1/5 from non-mercantile shopping.

**Total Shopping Savings from Mercantile and Non-Mercantile Markets, 2011-2015 (millions of dollars)**

Year	Mercantile	Non-Mercantile	Total
2011	\$391.60	\$105.1	\$496.70
2012	\$324.69	\$118.6	\$443.29
2013	\$600.81	\$143.3	\$744.11
2014	\$664.21	\$160.0	\$824.21
2015	\$487.19	\$157.8	\$645.19
<b>Total</b>	<b>\$2,468.50</b>	<b>\$684.80</b>	<b>\$3,153.30</b>

In addition to shopping savings, an additional \$12 billion was saved by Ohio's ratepayers between 2011-2015 as a result of using deregulation strategies to set the Standard Service Offer (Price to Compare). These savings inured to all customers of the IOUs, regardless of whether they shopped.

Total savings due to deregulation was around \$3 billion per year between 2011 and 2015.

**Total Savings Due to Deregulation in Ohio, 2011-2015 (millions of dollars)**

Year	Shopping	SSO	Total
2011	\$496.70	\$2,395.00	\$2,891.70
2012	\$443.29	\$2,366.00	\$2,809.29
2013	\$744.11	\$2,342.00	\$3,086.11
2014	\$824.21	\$2,380.00	\$3,204.21
2015	\$645.19	\$2,339.00	\$2,984.19
<b>Total</b>	<b>\$3,153.30</b>	<b>\$11,822.00</b>	<b>\$14,975.30</b>

Ohio has also seen significant price drops in the standard service offers since moving to 100% auctions to set the Price to Compare (as opposed to cost-based accounting). As these standard service auctions mature, we might expect that the available "headroom" (the difference between the price to compare and the price that commercial retail providers can offer) will be diminished. Accordingly, shopping savings in Ohio may not increase significantly going forward, if the standard service auction process has fully matured. In 2015 shoppers saved around \$645 million off of the SSO. If we assume that 2015 represents a mature auction market, we can forecast additional savings from deregulation going forward by adding this amount to the savings generated through the SSO auctions.

Using the \$645 million/year savings, along with the PUCO long term projections for electricity consumption to forecast savings from the standard service offer auctions, the Study Team forecasts that Ohio's ratepayers will save around \$2.98 billion/year for the next five years from deregulation, totaling \$14.9 billion. Projected savings for 2016-2020 are as follows:

**Total Projected Savings Due to Deregulation in Ohio, 2016-2020 (millions of dollars)**

Year	Shopping Savings	SSO Auction Savings	Total Savings
2016	\$645	\$2,333	\$2,844
2017	\$645	\$2,338	\$2,829
2018	\$645	\$2,343	\$2,833
2019	\$645	\$2,349	\$2,839
2020	\$645	\$2,354	\$2,844
<b>Total</b>	<b>\$3,225</b>	<b>\$11,717</b>	<b>\$14,942</b>

Unfortunately, the regulated portion of electricity – called "non-bypassable costs" (distribution, transmission and various riders) – have been trending upwards at the same time that competition has been pushing the generation portion of the costs down. As a result, the overall cost of electricity has not fully reflected the savings achieved through deregulation.

However, reregulating the generation portion of electricity will not reverse the rising costs of distribution and other non-bypassable charges. This only makes the argument for deregulation more compelling, since deregulation has been most responsible for the relatively low cost of electricity in Ohio. There exists no public policy basis for reregulating generation in Ohio.